UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

Date: June 19, 1989

Region II Removal Action Branch Edison, New Jersey

201-548-8730 - Commercial & FTS 24-Hour Emergency

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NRC TAT

POLREP:

Nine (9)

INCIDENT NAME/SITE NO:

Chemical Control Site/ 55

POLLUTANT:

Unknown compressed gas cylinders

CLASSIFICATION:

Major

SOURCE: LOCATION: Defunct Hazardous Waste Treatment Facility

23 South Front St., Elizabeth, N.J.

AMOUNT:
WATER BODY:

188 Compressed gas cylinders Elizabeth & Arthur Kill Rivers

1. SITUATION:

A. The Chemical Control Corporation property is located on a peninsula formed by the Elizabeth and Arthur Kill Rivers. In April 1980, a major fire engulfed the former Hazardous Waste Treatment Facility which led to the site's inclusion on the NPL in December, 1982. In 1984, the Response and Prevention Branch (RPB) was tasked to secure the 188 compressed gas cylinders at the site. All but 6 of the 188 cylinders were overpacked in specially designed carbon steel containers and staged on site for future disposal. The current Removal Action is employing a technology developed specifically to treat unknown cylinders on site. The site closure remedial action is proceeding separately from the gas cylinder removal.

2. ACTION TAKEN:

A. Operation of the Cylinder Recovery Vessel (CRV) and Vapor Containment Area (VCA) by Earth Resources Corporation (ERC) is continuing. The following is a synopsis of those overpacks and cylinders processed by ERC during the period from June 9, 1989 to June 16, 1989.



- Overpack 831: Contained hydrogen, vented via flare. Cylinder 831c: Contained air only, CRV processed.
- Overpack 748: Contained hydrogen, Vented via flare.
 Cylinder 748c: Contained air only, CRV processed.
- 3. Overpack 729: Contained hydrogen, vented via flare. Cylinder 729c: Perforated, no treatment.
- 4. Overpack 755: Contained hydrogen, vented via flare. Cylinder 755c: Contained air only, CRV processed.
- 5. Overpack 698: Contained hydrogen, vented via flare. Cylinder 698c: Contained air only, CRV processed.
- Overpack 813: Contained hydrogen, vented via flare.
 Cylinder 813c: Contained air only, CRV processed.
- 7. Overpack 816: Contained hydrogen, vented via flare. Cylinder 816c: Contained air only, CRV processed.
- 8. Overpack 830: Contained hydrogen, vented via flare. Cylinder 830c: Contained air only, CRV processed.
- 9. Overpack 829: Contained hydrogen, vented via flare. Cylinder 829c: Contained air only, CRV processed.
- 10. Overpack 803: Contained hydrogen, vented via flare. Cylinder 803c: Contained ethane and propane, flared.
- 11. Overpack 814: Contained hydrogen, vented via flare. Cylinder 814c: Contained air only, CRV processed.
- 12 Overpack 826: Contained hydrogen, vented via flare. Cylinder 826c: Contained toluene, processed via GAC.
- 13. Overpack 824: Contained hydrogen, vented via flare. Cylinder 824c: Contained sulfur dioxide processed via caustic scrubber.
- 14. Overpack 833: Contained hydrogen and air, vented via flare. Cylinder 833c: Contained air only, CRV processed.
- 15. Overpack 793: Contained hydrogen, vented via flare. Cylinder 793c: Contained air only, CRV processed.
- 16. Overpack 764: Contained hydrogen, vented via flare. Cylinder 764c: Contained air only, CRV processed.
- Overpack 701: Contained hydrogen, vented via flare.
 Cylinder 701c: Contained air only, CRV processed.
- 18. Overpack 797: Contained air only, no treatment.
 Cylinder 797c: Contained Perchloropropane, processed via GAC.

- 19. Overpack 734: Contained hydrogen and air, vented via flare. Cylinder 734c: Contained air only, CRV processed.
 - 20. Overpack 828: Contained hydrogen and air, vented via flare. Cylinder 828c: Contained n-perfluorobutane, processed via GAC.
 - 21. Overpack 796: Contained hydrogen and air, vented via flare. Cylinder 796c: Contained propane, hydrogen and a pyrophoric compound, flared.
 - 22. Overpack 794: Contained hydrogen and air, vented via flare. Cylinder 794c: Contained argon, CRV processed.
 - 23. Overpack 832: Contained hydrogen, vented via flare. Cylinder 832c: Contained methane and a pyrophoric compound, flared.
- 24. Overpack 817: Contained hydrogen, vented via flare. Cylinder 817c: Contained air only, CRV processed.
- 25. Overpack 827: Contained hydrogen, vented via flare. Cylinder 827c: Contained air only, CRV processed.
- 26. Overpack 807: Contained hydrogen, vented via flare. Cylinder 807c: Contained air only, CRV processed.
- 27. Overpack 834: Contained methane and perfluorobutane, flared.
 Cylinder 834c: Contained air only, CRV processed.
- 28. Overpack 743: Contained hydrogen, vented via flare. Cylinder 743c: Contained a hydrocarbon mixture, processed via GAC.
- 29. Overpack 769: Contained hydrogen, vented via flare. Cylinder 769c: Contained air only, CRV processed.
- 30. Overpack 707: Contained hydrogen, vented via flare. Cylinder 707c: Contained air only, perforated.
- Overpack 706: Contained air only, no treatment.
 Cylinder 706c: Contained air only, perforated.
- 32. Overpack 810: Contained air only, no treatment. Cylinder 810c: Contained air only, CRV processed.
- 33. Overpack 746: Contained hydrogen, vented via flare. Cylinder 746c: Contained air only, CRV processed.
- 34. Overpack 768: Contained hydrogen and methane, vented via flare.

 Cylinder 768c: Contained air only, CRV processed.

- 35. Overpack 703: Contained hydrogen, vented via flare. Cylinder 703c: Contained air only, CRV processed.
- 36. Overpack 805: Contained air only, no treatment. Cylinder 805c: Contained air only, CRV processed.
- 37. Overpack 890: Contained methane, vented via flare. Cylinder 890c: Contained air only, CRV processed.
- 38. Overpack 877: Contained methane, no treatment.
 Cylinder 877c: Contained air only, CRV processed.
- B. To date, a total of 168 cylinders and 162 overpacks have been processed on site. Of the 162 overpacks processed so far, 129 have contained hydrogen and/ or other contaminants which required treatment. The disposition of the 168 cylinders were as follows: 19 were visibly perforated, 122 were sampled in the CRV and were able to be vented through the flare and 26 cylinders required treatment through either the molecular sieve, the caustic scrubber, the flare or the activated carbon unit. One cylinder was valve sampled and contained only air.
- C. At the request of a local Haz-mat team in Oregon, one empty overpack was shipped from this site to the emergency in Oregon. The Oregon site involved a leaking cylinder of Hydrogen Chloride that had been abandoned in a populated part of the City. The overpack, which weighed nearly 1,300 pounds, was placed in a wooden crate and shipped via air freight. Upon its arrival in Oregon, EPA and ERC assisted the Haz-mat team with safe and appropriate overpacking procedures. The operation was completed without incident and the leaking cylinder is now secure. The municipality of Oregon City payed for the entire cost of shipment. Ownership of the overpack after the emergency is resolved will be decided at a later date.

3. FUTURE PLANS AND RECOMMENDATIONS

- A. Cylinder processing will continue as scheduled.
- B. Plans for disposal of solid and liquid material generated by on site activities will begin.

4. FINANCIAL STATUS:

A. Total Project Ceiling Authorized

\$ 1,888,000

B. Total Funds Authorized for Mitigation Contracts

\$ 1,670,000

C. Expenditures for Mitigation Contracts (Rounded)

	1.a. Amount obligated under DCN's # 0027 & 3013	\$ 1,670,000
	1.b. Estimated expenditures as of 6/14/89	\$ 1,187,797
	1.c. Balance remaining	\$ 232,202
D.	Contingency Funds Available	\$ 47,200
E.	Other Extramural Costs (Rounded)	
	TAT Salary/Travel as of 6/14/89 (TAT Ceiling as of 6/14/89, \$66,000)	\$ 43,630
F.	Intramural Removal Costs (Rounded)	
	EPA Salary/Travel as of 6/14/89 (EPA Ceiling as of 6/14/89, \$104,400)	\$ 31,483
G.	Total Expenditures (Rounded)	\$ 1,262,912
	Percent of \$2 Million	63%
	Percent of Total Project Ceiling	67%

FINAL	POLREP_	FURTHER POLREPS FORTHCOMING SUBMITTED	BY_	
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MARK P. PANE, OSC REMOVAL ACTION BRANCH

DATE RELEASED JUNE 22 1989